RESPONSES TO QUESTIONS ON RFI TD-97-01 RECEIVED ON MAY 2, 1997

A major intent of the RFI is to solicit information from interested parties, individual companies or strategic teams to help the state determine the scope of the forthcoming RFP. Some questions received requested significant detail about the equipment and services of the current environment. A comprehensive response to those questions would significantly delay this RFI and the resulting RFP, as well as distract from the original intent of this RFI. The state has endeavored to respond in a timely manner to each question in a depth deemed appropriate for interested parties to make an informed response to this RFI. Full detail will be provided in the future RFP to support the final scope of services requested. If there are specific areas of detailed information that you believe need to be included in a future RFP, please identify in your response to the RFI. The following is a list of the questions received to date and the state's response.

1. What is the current staffing of the Network Management Center, Billing, Order Processing and Design Departments? Would like number of people by position, level of knowledge, contracted vs. state employee.

RESPONSE:

The current CALNET staffing is not relevant in this RFI process. The intent of the RFI is to determine the scope of an eventual RFP. Until that determination is made the impact on staffing is unknown, and may in fact be an issue for each potential bidder to ascertain. Presently the operation, maintenance and billing of CALNET services is provided principally through contracted staff services with state staff participation and performance oversight.

2. Are there any State employees that will need to be picked up by winning vendor(s)?

RESPONSE:

The intent of this RFI is to determine the scope of an eventual RFP. Until that determination is made the impact on state staffing is unknown. The state does not anticipate an RFP requirement for state employees to be picked up by a winning contractor. Presently the operation and maintenance of CALNET is provided through contractor services

3. Has the MCI contract for all services been canceled, understand that there is a one year cancellation clause.

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RESPONSE:

Existing contracts and agreements will not be canceled until the scope and schedule of the eventual RFP has been determined. Responses to this RFI will help in determining these issues.

4. What are the actual numbers: Caldex Lines by Location, Centrex Lines by City, total debit for all equipment to be assumed, Calnet billing to agencies for all services?

RESPONSE:

CALDEX Lines by Location: - See RFI Section 3.1.5.2.3.
Centrex Lines by City: - See RFI Sections 3.1.5.1.1, 3.1.5.1.2, and 3.1.5.1.3.
Total debt for all equipment to be assumed: - See RFI Section 4.4
CALNET billing to agencies for all services: - See RFI Section 3.1.4

5. Does Calnet have any non-State agencies under contract for services?

RESPONSE:

CALNET services are used by some non-state agencies. However, the state does not have any binding contracts with those non-state agencies for service. The non-state agencies represent about 10% of the total minutes of long distance usage on CALNET (See RFI Section 3.1.5.2.1). In addition, there are about 33,797 Centrex lines and about 1,257 CentraNet lines associated with non-state agencies (See RFI Table 3.1.5.1.2 and Section 3.1.5.1.3).

6. Will the RFP define if telecommunication services will be provided for all General Funded State agencies or will services be available on a elective basis by each individual state agency?

RESPONSE:

The RFP will define the level of participation required of state agencies. The existing policy requires that all state agencies under administrative oversight use contracts issued by DGS/TD to obtain voice and data services (Management Memo 97-01 issued by the Department of Information Technology on January 14, 1997).

7. Is the State of California looking to privatize all telecommunication services or streamline certain services such as maintenance only?

RESPONSE:

The state is seeking the best competitive service available in the competitive marketplace today. One of the purposes of the RFI is to obtain information from the private sector to assist the state in determining what level of privatization makes good business sense.

8. Will a private debriefing be available per company between the RFI and RFP timeframe?

RESPONSE:

The state will be available to discuss any questions interested parties may have regarding the RFI up to May 16, 1997. The state may contact interested parties between the RFI response date and the issuance of the RFP to clarify RFI responses. The state does not plan to offer private debriefing at this time. The anticipated timeframe between receipt of the RFI responses and the issuance of the RFP does not allow for such a debriefing schedule for all interested parties.

9. What scope of State of California employees will be available to our companies RFP response team?

RESPONSE:

When any future RFP is issued, the state will assemble a team of administrative, technical, procurement, and user staff to conduct the RFP and interface with respondents in the RFP process. Please be advised that all state resources will be managed through the RFP process and not dedicated to a contractor team or made available directly to the contractor team.

10. How much of the State's debt load is directly attributable to the voice mail equipment?

RESPONSE:

There is no outstanding debt associated with the Department of General Services voice mail equipment.

11. In question 5.2.2.4, there is reference made to "user". Please define "user". We can interpret it as "The State of CA - DGS System Administrative Group" or "enduser".

RESPONSE:

In this reference the user is the individual within a department that is responsible for managing the service on behalf of the "end-users". This is typically not DGS/TD CALNET staff.

12. In addition to our being placed on the CALNET RFI/RFP bidder's list, we also request that we receive (if available) a complete list of bidder's and any responses to bidder's questions to date.

RESPONSE:

This is the first response to questions submitted to date on this RFI. This is not a bid, it is only a request for information. Attached is a listing of the interested parties that were sent a notification of release of the RFI. All participants in the RFI process will be added to this list. However participation is not required to be included in any future RFP.

- 13. In section 1.1, the State explains that it has issued the RFI to "Allow the state to seek industry counsel in the marketability of CALNET and all state telecommunications networks." Since this is one of the goals of the State and while the RFI has provided us with a great deal of information, we do not believe that we have enough information to allow us to make informed decisions in our response to the RFI itself and to the resulting RFP. We do not have a detailed inventory of CALNET's equipment and software. In order to understand the State's RFI and to design an architecture for the State for CIIN, we need the following information:
 - a. a detailed, complete inventory of all CALNET, CALDEX, and NMS equipment
 - (1) included in this inventory will be manufacturer, model numbers, configurations, and software revision numbers
 - (2) copies of all service agreements associated with the hardware and software
 - (3) copies of all software licenses
 - (4) copies of any lease agreements
 - (5) HVAC, generator, UPS, battery, weight, floor loading, and other power and environmental requirements
 - b. a listing of all software licenses of software used in CALNET that are currently held by any potential bidder, whether prime contractor or subcontractor, for the CIIN RFP; the listing shall identify the bidder's name with the associated items
 - c. a copy of all software licenses

RESPONSE:

This type of detailed information will be included in the RFP if it is determined through the RFI responses that the sale of CALNET is feasible and in the best interest of the state. Your response to the RFI is important to help the state determine the specific schedule and scope of the RFP. It is important for you to identify in the RFI response all of the information required for your company to provide a comprehensive response to any future RFP that includes the sale of CALNET.

14. The State is asking participating vendors to assume a \$20 million debt as part of the RFP. The State has also stated it believes there is value in the existing network. John Flynn of DOIT recently said, "We think we have a salable commodity here." (April, civic.com, p. 27) In order for a vendor to purchase the CALNET assets and in order for the State to sell its CALNET assets, CALNET, including CALDEX and the

NMS, must have a fair market value established. Has the State established a fair market value? If a fair market value has been calculated for any part or for all of these assets, what is that value and how was it determined? Financial institutions typically require full disclosure, including all termination liabilities and copies of all pertinent financial documents, to fund a purchase of this type; this information is requested.

RESPONSE:

The state has not made any determination as to the fair market value of the CALNET assets. The vision of the state is to sell the existing assets, relieve the state of the associated debt, and obtain services. It will be up to each responding company to determine a market value in relation to the service package offered in the RFP.

Responses to the RFI should identify specific information that will be required from the state in order for interested parties to provide a comprehensive response to a RFP.

- 15. We need further explanation as to the capability of CALNET in terms of industry standards.
 - a. Is CALNET capable of providing number portability?
 - b. Is CALNET National ISDN-1 compliant? Can CALDEX provide National ISDN-1 compliant service?
 - c. Is expanded digits' area code (i.e., more than 3) supported?
 - d. Are CALNET's switches and SCIPs fully Signaling System 7 (SS7) compliant with the Bellcore standards, such as TR-317, -394, and -533?
 - e. Since DOIT has mandated that all State agencies be on CALNET, what are the trunking abilities of CALNET to connect to the smaller LECs?
 - f. Is the State aware of any additional areas where there may be a potential misunderstanding of capabilities?

RESPONSE:

The state does not believe all the information requested is necessary to respond to the RFI. However, the following information is provided at this time. Details of all equipment, configurations, and capabilities will be included in an eventual RFP.

- a. CALNET is not currently configured to deliver number portability services. "Number portability services" in a broad sense is still being defined. CALNET is capable of communicating with a database server to obtain number translations for called/calling numbers as appropriate and then routing the call based on the database information returned, etc..
- b. The current software release installed in all of the nodes (MSL06), NORTEL claims to be National ISDN-1 compliant. The packet handler installed in these nodes is also claimed to be compliant. Currently, CALNET does not have any National ISDN-1 services in operation although some internal ISDN services have been tested. CALDEX is believed to be capable of providing National ISDN-1 service.
- c. While the software load in the CALNET switches has been modified to support 15 digit international dialing (some aspects of which are referred

- to as expanded digits features), there does not appear to be any change in the NPA (area code) digits (still limited to three) however the FREECALL support changes have been incorporated (allowing the second character of the NPA to have values other than zero and one).
- d. CALNET was tested with Pacific Bell for TR-317 functionality and was reported by Pacific Bell to be compatible with their SS7 service. TR-394 testing of the CALNET switches has not been completed but the software is installed in the switches, (providing Virtual Access to Private Networks-VAPN as well as Equal Access End Office- EAEO capabilities) and is reported in the NORTEL feature documentation as supporting TR-394. Some parts of the functionality defined by TR-533 are reported to be included in CALNET. The specific TR-533 shortcomings of CALNET have not been identified but are in part suspected to be related to the FREECALL enhancements to the NPA.
- e. The "DOIT mandate" provides flexibility in the connectivity of CALNET and agencies. Generally, CALNET connectivity to agencies served by the small LECs can be achieved using Feature Group D.
- f. Many potential misunderstandings of capabilities can exist for a collection of products such as are in CALNET. It is appropriate that each vendor that is interested in participating in the eventual RFP, seek basic information from which to reach independent conclusions regarding capabilities of CALNET.
- 16. It is our understanding that the State's configuration of the Meridian Super Node (MSN) switches are proprietary and only installed in CALNET. Further, they are composed of Nortel's SL-100 cabinets, internal addressing, and backplanes, with a combination of PBX-compliant trunks (as opposed to LSSGR-compliant Central Office trunks), PBX software modules, and certain Class 4 and Class 5 central office software modules.
 - a. Is the above description correct?
 - b. What SL-100 software modules and version number(s) are in these switches? What Class 4 and Class 5 BCS version numbers and modules are in these switches? What unique software modules are in these switches?
 - c. If these switches should be decommissioned, can they be altered into DMS-100s, DMS-200s, DMS-250s, DMS-300s, or DMS-500s in a costeffective upgrade? Also, can these switches be modified into becoming SL-100 PBXs? Has the State received quotations, estimates of the cost, or advisability of these conversions? Please supply us with copies of any correspondence, quotations, or studies about this topic.
 - d. Does the State have any fair market value estimates of this equipment? If so, please supply.

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RESPONSE:

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It is the state's understanding that the switches are MSL-100 with the Network Services Software (NSS) operating on version MSL06. All are products offered by NORTEL and are available to anyone. We understand that the State of California is the only customer utilizing these switches with the NSS software features. The system was purchased through a specification of features paralleling those available in the central office environment. The switches interface with both LEC and IXC facilities and are compatible with intrastate, interstate and international services. It is also the state's understanding that the cabinet wiring is different than the DMS-100 and 250s, but the hardware modules are identical. The manufacturer would have to be contacted to determine the conversion capabilities of this product. Please refer to the response to question 14 concerning the fair market value of this equipment.

17. One potential vendor for CIIN is GTE, which holds a tax exempt, non-transferable, approximately \$20 million note of the State's. How will the State establish a method of bidding that does not create a unique, financial advantage for GTE?

RESPONSE:

As of 12/1/97, the state will have a debt obligation of approximately \$20 million to GTE Leasing Corporation. It is the states' intent to be relieved of this obligation through the requirements of any future RFP. If there are any factors that the state should be made aware of we would expect them to be discussed in the response to this RFI.

18. GTE holds a non-transferable license for much of the software used in the State's NMS. How will the State provide an equitable way for other vendors to bid against GTE for the State's business?

RESPONSE:

Most of the software licenses currently used for CALNET are part of the existing maintenance agreement with GTE and are included in the state costs paid for the service. As indicated in RFI Section 5.1.6, the successful contractor will need to obtain rights to use this software and include it in their proposal if they continue use of such software.

19. If all telecommunications services are to be bid in the CIIN RFP and the State network must interface with payphones, why have payphones not been included in the RFI? Are there any termination liabilities associated with the current payphones' contracts; if so, what are these liabilities?

RESPONSE:

Pay Telephones services are provided as a concession under MSA 1013. These services do not interface with CALNET, nor are there any plans to do so. Because of the uncertainty of the regulatory, judicial, and legislative environment, it has been determined to be in the best interest of the state to initiate a separate RFI and RFP process.

- 20. Since "It is the state's intent to ultimately replace the current environment of independent, heterogeneous, state-owned, telecommunications networks with an integrated, flexible, and efficient statewide service relying to the greatest extent feasible on contractor-owned and contractor-operated infrastructure and the competitive acquisition of management, operations, and service delivery" (1.1), we need a list of the following: all network services contracts, value, expiration dates, termination liabilities, special terms and conditions, and location of all points-of-presence of the associated vendors
 - a. for DGS TD
 - b. for non-DGS TD State users
 - c. for non-State users

This information is necessary in order to analyze grades of service, loading, traffic volumes, and capacities.

RESPONSE:

All contracts with the appropriate information are listed in RFI Table 3.1.4b. If specific information is needed to respond to a RFP as described in Section 4, the state would expect that it be identified in the response to this RFI.

- 21. In 5.2.1, the State's desire for a state-wide virtual network, to serve public safety similar to the way private networks have met this need, is expressed. How does the State believe that this technology will provide for public safety? What special characteristics of a virtual network would be required in order to meet the State's public safety needs?
 - a. What are the State's parameters, such as MTBF, MTTR, etc., of acceptable performance for public safety? What are the State's requirements for emergency services?
 - b. The State indicates that special or sensitive services are required for certain agencies. With regard to the following,
 - (1) Office of Emergency Services (OES)
 - (2) **DMV**
 - (3) Bureau of Automotive Repair (BAR)
 - (4) CHP
 - (5) Department of Corrections' 32 prisons, and
 - (6) any similar State agencies

What are these services? What quantities, by location, are required?

RESPONSE:

In Section 5.2.1 the state is seeking voice network services, not necessarily a virtual network. A virtual network may or may not be the best solution. At this time DGS/TD is looking for guidance from the telecommunications business community in formulating the RFP. Responses to the five (5) questions under Section 5.2.1.1 will help DGS/TD structure the eventual RFP to address the needs of public safety.

22. The Public Safety MicroWave (PSMW) System connects to the NMS (3.1.2.1.2). Please define this connection and describe the PSMW System requirements. What, if anything, is required for the PSMW System or for any other State radio system? We need a detailed description of the PSMW System. We request information about the State's intentions toward the APCO Project 25 digital public safety, radio standard, toward trunked radio, and toward the NCIC 2000 requirements as they may affect the CIIN.

RESPONSE:

The PSMS and State radio systems are not be included in the CIIN proposed environment. Therefore any radio standards will not be part of any future RFP resulting from this RFI. If there are any NCIC 2000 requirements that may affect the CIIN proposed environment and should be identified in a future RFP, the state would like them identified in the response to the RFI.

23. Since the State is also exploring the marketability of the NMS, the physical location of the NMS is of concern. The NMS is located in a flood plane, next to an earthen levy, and below the flood water level of the adjoining river. The NMS is also located in the vicinity of a toxic waste dump, known to contain PCBs. Is there any additional environmental information that is known to the State concerning the location of the NMS? Does the State have any environmental studies concerning the NMS location? If so, we request copies of these studies. In 4.4.4, the State indicates it is agreeable to lease space in certain sites. Is the State leasing the NMS building facility, or is it the owner? If the State leases, what are the terms of the lease, its value, and any termination liabilities? Has the State studied the movement of its NMS to another location? Will the results of these studies or discussions be included in the RFP?

RESPONSE:

The state does not have any environmental information or studies concerning the NMS location. The state leases the building that contains the Network Management Center (NMC) and other state telecommunication functions. The state plans to continue leasing the building for its staff functions and will consider subleasing the NMC facility. The state has no plans or studies concerning moving the NMC to another location.

24. What is the definition of "low cost basic services" as used in 5.2.2?

RESPONSE:

"Low cost basic service" would be defined as service comparable to local measured business service often referred to as 1MB.

25. The communications industry is moving in the direction of SONET fiber rings. What is the State's expectation, expressed as operating parameters, for network redundancy and for local loop redundancy?

RESPONSE:

The state would like to take advantage of the latest technology in obtaining services through the eventual RFP. Responses to questions in Section 5.9.2 and 5.9.3 will help to formulate the operating parameters to be used in the eventual RFP.

26. With respect to Figure 3.1.5.2.2 and in view of the recently awarded inter-LATA bid, we need to know what the network will look like once the new network is implemented, including a detailed, physical topology map.

RESPONSE:

There will not be significant changes to the network topology as a result of the recently awarded interLATA bid. The most significant change is the elimination of the link between San Francisco and Los Angeles. Service performance will be maintained through the use of fast restoration circuits from the IXC. The eventual RFP will provide the most current view of the network topology.

27. With respect to 3.1.1.3, why has ISDN not been provided by CALDEX?

RESPONSE:

A coordination process is currently underway to ensure that all required elements are in place to support ISDN for CALDEX clients. These elements include: sets types supported, service definition and features, rate establishment, ordering procedures, billing structure, trouble reporting, etc. When this coordination process has been completed, a service announcement will be made to CALDEX agencies. There are no known technical reasons the service can not be offered.

28. How are the State's networks, including CALNET, timed? What are the sources of this timing? Is the State using the plesiochronous capabilities of its NET IDNXs to manage multiple network clocks? Does the State own and use any Stratum One, "1.5," or Two clock sources? If so, what are these sources and where are they located? Are these sources to be included?

RESPONSE:

The CALNET synchronization plan is a plesiochronous operation. At each major and hybrid SCIP, CALNET receives two stratum 1 signals, one from Pacific Bell and one from the IXC. The timing signals are terminated on an Auston Inc. Model 3800. The Model 3800 provides an internal stratum 2 clock in case the stratum 1 signal is lost. The Model 3800 provides clocking to the IDNX, DEXC, MSN, and minor SCIPs. DGS/TD

owns four (4) Model 3800s. They are located in each of the major SCIPs and San Diego (Hybrid SCIP). This equipment will be included for consideration in the eventual RFP.

29. In 3.1.1.7 and 3.1.5.2.4, references to some agencies having their own voice mail systems is made. Will the State continue to support multiple "islands" of voicemail systems or will these systems be included in the RFP? If not included, how can these systems be networked with the voicemail in the proposed CIIN? We request a detailed listing and description of the interfaces, so that the impact on the overall network may be evaluated.

RESPONSE:

Sections 3.1.1.7 and 3.1.5.2.4 describe the service the state currently has today. RFI Section 4.3.2.1. describes the types of voice processing services the state is seeking on a statewide basis. The purpose of the RFI is to seek comments from the private sector that will assist the state in developing an RFP to migrate current services to those being proposed. We are looking for suggestions on how to proceed to meet the objective of statewide voice mail services. That may require the successful bidder to take over the existing state systems, network them in some manner, supplement them with other services and phase the existing state systems out over a period of time. It may require the state to retain the state systems until they reach their useful life before moving to new services or there may be some other options. We are hopeful that the RFI responses, will assist us in establishing the requirements for the RFP. The state owned systems are commercial products using industry available interfaces.

30. The direction from DOIT is for an all-or-nothing, single winner to the RFP. Table 3.1.5.1.2, Pacific Bell Centrexes Under Contract Not Managed by DGS, lists over 33,000 lines. Are these to be part of the RFP? If so, is the State aware that Pacific Bell holds binding contracts for all these locations with five year terms? Is it the intention of the State for the winning vendor to buy out the termination liability, if they are to be included? Should the State decide to include these in the RFP, then the State should also include PBXs and KTSs under contract and not managed by DGS TD.

RESPONSE:

The Pacific Bell Centrexes listed in Table 3.1.5.1.2 are identified to show the magnitude of use of the existing Centrex agreement. The non-state agencies using those Centrexes would not be considered in the guaranteed user base of the eventual RFP. However, any contract or service provided by the state will be available to all public agencies. The information was provided because there is a potential for those users to take advantage of the new contract as they have done with the Centrex agreement.

The purpose of the RFI is to solicit information from the private sector to assist the state in determining the scope of services to be included in a future RFP. The state welcomes comments on whether Pacific Bell Centrexes Under Contract Not Managed by DGS,

PBXs and KTSs should be included and under what conditions. Would the private sector be willing to buy out any remaining termination liability for future guaranteed service?

31. The State owns a number of PBXs and Key Telephone Systems-Hybrids (KTS). Because the State has included Centrex for evaluation in the RFI/RFP, will the State also include PBX/KTSs? To best evaluate, we would need the following: costs of service, any termination liabilities, makes and model numbers, and number of stations? If the PBXs and KTSs are not part of the RFP, must they be networked? If so, who bears the costs of networking these pieces of equipment and of the networking of consolidated and non-consolidated Voice Mail systems? What is the State's definition of networking PBXs and KTSs and of Voice Mail systems? If the State has any cost estimates to network non-consolidated Voice Mail systems, please provide this information.

RESPONSE:

It is not the intent of this RFI to address the replacement of all customer premise equipment which includes PBXs, KTS, telephone sets, etc. However, the local and long distance services supporting this equipment is included. As noted in the response to question 30, the state is interested in your comments whether this type of equipment should be included and under what conditions. The state would be particularly interested in a business case for such action. The state's current direction is to include consolidated line services that are provided directly by DGS/TD and those provided through DGS/LEC contractual arrangements with Pacific Bell and GTE. It includes all state line services installed under these contracts whether managed by DGS/TD or by an individual state agency. Local government agencies currently receiving service via these agreements will have the option to convert their service to the new contract arrangement but will not be required to do so.

If PBXs and KTSs are included in a future RFP, appropriate technical and fiscal information would be included at that time.

32. Which of the State's PBXs and KTSs support four digit area codes and number portability? Which do not?

RESPONSE:

This information is not available at this time. It would have to be gathered should it be determined that this service is to be included within the scope of a future RFP.

33. Are there any Year 2000 software problems associated with any State PBX, KTS, NMS, CALNET, CALDEX, or PSMW System equipment? If so, we request a full description of any problems and identification of all affected equipment.

RESPONSE:

The state is currently involved in a program to identify and correct all year 2000 software problems. Some corrective actions are completed and some are in progress. Any pertinent unresolved year 2000 software problems, and the status of the planned corrective actions, will be identified in conjunction with the issuance of any future RFP.

34. Intelligent Call Routing (ICR) is defined by the State in section 4. However, the State does not ask for ICR in section 5. If the State wants ICR, where is ICR to be provided? Does the State have a standard for ICR? If so, what is this standard?

RESPONSE:

Section 5.2.2.6 Call Centers states: "In section 4.3.2.2, the state outlined its minimum requirements for call center services including ACD, announcements, MIS, computer interface and intelligent call routing". The two questions in that section relate to your company's ability to provide all of the services as listed in section 4.3.2.2. In addition, Section 5.2.1.5.1 Functionality, under Toll Free Services, question 2 also asks what enhanced routing capabilities can your company offer.

35. 4.8.2 discusses training. How many employees are to be trained? What is their background? Who will pay for this training? Over what period of time must this training be provided? To what level of knowledge must these employees be trained? What standards will be used to assess the effectiveness of the training?

RESPONSE:

Training in this context is intended to be an ongoing overhead item within the service contract. Similar staff training efforts are currently included in existing service rates and costs. The number and specific staff classifications, and the training requirement details, will not be known until after all RFI responses are reviewed and a future RFP objective is defined. The background of those likely to be involved will include telecommunications engineers from several specialty areas, telecommunications service and business analysts, and various telecommunications service supervisors and managers. The experience levels will range from little experience to many years in the profession.

36. Are the Information Services employees, described in 5.2.4.3.1, unionized? If so, what union? What are their classifications? What are their pay grades?

RESPONSE:

Employees are classified as Telephone Operators and are covered under a collective bargaining agreement between the State of California and the California State Employees Association (CSEA). The annual salary range (including benefits) for this classification is estimated at \$26,400 - \$33,275.

37. 5.2.4.2 discusses the State owned fiber. Since the vendor is expected to assume ownership and operation of the fiber, please define the size of existing conduit, its type, and the date of installation. Please identify the vintage of the fiber, types of fiber, types and intervals of splices and connectors. What electronics uses the fiber, and will these existing applications be included in this requirement? What agencies, and at what locations, are being included in this requirement? Since the vendor is assuming the ownership and operation of the fiber, may the vendor charge a monthly fiber maintenance service fee?

RESPONSE:

In 1987, DGS/TD contracted for the installation of fiber optic cabling between 18 buildings in the downtown Sacramento area. A 72 fiber cable was utilized, consisting of both multimode (primarily 62.5/125 and some 100/140& 50/125) and single mode fibers. The cable was arranged so as to form a 3 KM continuous loop, with 12 of the 18 buildings being directly attached to the loop. The other 6 buildings can access the loop via fiber spurs. The fiber cabling was routed between the buildings utilizing a combination of 4" underground conduit and a cable tray system within the State's steam tunnels. Typically, this cabling was brought into the main telephone room within each building, and terminated in a fiber optic patch panel. Access to the loop was achieved by using fiber optic jumpers and either Biconic or ST interconnections at the patch panel. DGS/TD maintains Rockwell 3X50 equipment at 7 downtown buildings which can provide access at DS-1 or DS-3 bandwidths to the Sacramento SCIP. In addition, the loop supports a number of specialized functions including an Ethernet network supporting the Energy Management System, point to point Ethernet links between Departments in different buildings, some point to point DS-1 connections, and access links for various microwave systems utilized by CALNET and others.

DGS/TD currently contracts with a company for 7 day a week, 24 hours a day repair and maintenance services. The company must also meet certain DS1/DS3 performance requirements on the equipment under their contract. DGS/TD has developed a rate structure for many of the agencies utilizing the loop. There are several agencies, however, who are not charged because of their initial participation in the fiber loop project.

38. It is our understanding that the State also has Nortel DPN100s in the network. How many DPN100s are in the network? Are they owned or leased? What are their locations, configurations, uses, and contract termination liabilities? What is their cost of maintenance?

RESPONSE:

The DPN100's in the current CALNET system are used exclusively for the CALNET Network Management System (NMS) and billing data collection, and have little installed capacity beyond that need. They are part of the CALNET assets to be divested and are included in the \$20 million debt. Basically, there is a DPN100 presence at each of the CALNET SCIP's, and they are interconnected through a redundant transport system to

the CALNET Network Management Control Center (NMCC) in Sacramento. The cost of maintenance is included in the CALNET service contract. Once the RFI responses are reviewed, and final decisions on bid intent are made, the description of all pertinent subsystems and their components will be included in the resultant RFP.

39. In 5.2.4.1.1. is the service interval only for building wiring?

RESPONSE:

As stated in 5.2.4.1.1., the service interval applies only to building wiring. It is, however, the state's intent in an eventual RFP to define service implementation intervals for all service types and common installation situations.

40. In 5.2.3.9,

- a. What is the State's definitions for "service classes" and for "turnkey interconnection services"?
- b. Please list the makes, models and software versions for the monitor routers, CSUs, DSUs, and FRADs. Are all of these devices monitored by the NMS?

RESPONSE:

- a. Service classes in this section refers to the various types and options of data communications services that may be offered with the eventual RFP. Examples of the options could be security levels, terminating point restrictions or approvals, or data flow control. The turnkey option refers to the ability of a service provider to install, operate, and maintain the data services including the equipment located on the customer's premise that is dedicated to the communications function.
- b. The volume of the requested detail information for all services is very large and would take a significant time to gather. Once RFI responses are reviewed, and final decisions on bid intent are made, the descriptions, locations, interconnections and quantities of all pertinent system devices and software will be included in the resultant RFP. The state is requesting a description of how your company offers a 7X24 help desk with the option to monitor routers, CSU/DSU's and FRADs. If your company is limited to certain makes, models and software versions, please identify those limitations in your response to this section.
- 41. Have any studies or recommendations been performed or made, both for DGS/TD and for DOIT, that led to the release of the CIIN RFI? We request that copies of these materials, pro or con, be supplied.

RESPONSE:

Pertinent documents include: *Getting Results* - June 1995

Internet address: http://www.ca.gov/gov/gcit/toc.html

Strategic Direction for Telecommunications in the State of California - January 1996

Internet address: http://www.dgs.ca.gov

Competitive Government - April 1996

Internet address: http://osp.ca.gov/compete.htm

California Integrated Information Network Report - December 1996

Internet address: http://www.doit.ca.gov

42. Please describe the State's contractual arrangements for the publishing of its directories, its costs, and its obligations.

RESPONSE:

DGS/TD has two contracts with the Office of State Printing; 1) for all activities associated with printing and distribution and 2) soliciting directory advertising. DGS/TD also has an agreement with DGS Publications for directory sales to the public. Costs for the 1997 directory, excluding staff support is \$258,049. Contracts are renewed annually based on encumbered funds.

43. How does the State collect and maintain its data for its telephone directories? Will these sources remain available to the selected vendor?

RESPONSE:

The State's uses a comprehensive PC MS Windows based system to administer directory listings and telephone operator directory information files. Agencies are currently DOS based but will migrate to Windows in July 1997. Each agency's directory listing is provided on diskette and hard copy for review, update, and return for import. Updates are submitted on a regular basis and concurrently are provided to the State Telephone Operators through LAN connectivity. The availability of these resources to contractors has not been determined. It should assumed that the selected contractor will be responsible for these functions.

44. We believe that the design and operation of Call Centers is so integral to the operation of specific agencies that Call Centers are not amenable to blanket solutions. This means that each Call Center must be defined, designed, implemented, and operated on a case-by-case basis. Does the State agree with this statements?

RESPONSE:

The state agrees that each call center must be defined, designed and implemented to meet the specific business requirements of the client agency. However, call center service options and elements would be based on the available contracted services, according to the terms and conditions of the awarded contract.

45. Please describe the State's use of its IDNX equipment. Should IDNX use be discontinued?

RESPONSE:

The state plans on decommissioning the IDNX equipment prior to the release of the eventual RFP.

46. How many Frame PVCs, in all State networks, go to routers as compared to FRADs?

RESPONSE:

The detailed information requested is not readily available and is changing rapidly. However, the following information is provided to identify the magnitude of the existing Frame Relay service.

The present CALNET supported Frame Relay service consists of 1,183 PVCs. The network is growing at about 8 to 10 PVCs per business day. There are presently 900 DS0 and 571 T-1 access links into the Frame Relay network. The CALNET backbone provides 19 T-1s for Frame Relay transport. Specific detailed information relative to the Frame Relay service will be provided in the eventual RFP based on the response and comments to this RFI.

47. Please describe CALNET's billing systems. Does CALNET adhere to AMA format?

RESPONSE:

CALNET's proprietary billing system was described in section 3.2.3.1. CALNET does not adhere to an AMA format.

48. Please provide technical information on the three MSNs in the major SCIPs and the remote switch in the San Diego hybrid SCIP

- a. Hardware configuration
 - (1) number and types of modules currently equipped
 - (2) number and type of processors
 - (3) capacity (e.g., lines, trunks, calls processed)
 - (4) where is the host for the San Diego remote switch?
- b. Software
 - (1) current release
 - (2) included feature packages
 - (3) supported applications (e.g., call center, mail messaging, wireless, CTI)
 - (4) ISDN capability; number of ISDN lines
 - (5) capability to support AIN 0.1 triggers

RESPONSE:

The intent of the RFI is to solicit input from interested parties to help define the scope of the eventual RFP. The state does not believe the information requested is necessary to respond to this RFI. It may, however, be necessary depending on the final scope of the RFP at which time details will be included. To clarify the San Diego remote configuration, Los Angeles is the host for San Diego.

49. Please provide technical information on the DCS and M1/3 multiplexor in the SCIPs

- a. manufacturer and type
- b. port configuration
- c. features
- d. capacity

RESPONSE:

The state does not believe the information requested is necessary to respond to the RFI. However, the following information is provided at this time. Details of all equipment and configurations will be included in an eventual RFP.

The DCS manufacture is DSC Communications Co. The Digital Cross Connect System Configuration is as follows:

SCIP	DS3	DS3	DS1	DS1	Model
	Capacity	Equipped	Capacity	Equipped	
Los Angeles	8	8	336	208	CS-1L
Sacramento	8	8	448	351	CS-1L
San	8	8	336	168	CS-1L
Francisco					
Redding	0	0	84	62	CS-1S
Stockton	0	0	84	80	CS-1S
Fresno	0	0	84	73	CS-1S
Bakersfield	0	0	84	59	CS-1S
San Diego	0	0	84	74	CS-1S

The M1/3 manufacture is Rockwell Int. The M1/3 system configuration is as follows:

The title and th							
SCIP	Quantity	DS3	DS3	DS1	DS1	Model	
		Capacity	Equipped	Capacity	Equipped		
Los Angeles	2	4	4	112	112	DML 3X50 Dual Muldem	
Sacramento	6	12	12	336	336	DML 3X50 Dual Muldem	
Sacramento	8	8	8	224	224	DML 3X50 Muldem Lightwave	
San Diego	1	2	2	56	56	DML 3X50 Dual Muldem	

San Diego	1	1	1	28	28	DML 3X50 Muldem Lightwave
San Francisco	1	2	2	56	56	DML 3X50 Dual Muldem
Stockton	1	1	1	28	28	DML 3X50 Muldem Lightwave

50. Please provide on-net and off-net voice and data traffic characteristics and call volume between locations

- a. total
- b. busy hour
- c. average call holding time
- d. overflow traffic handling

RESPONSE:

The state does not believe the information requested is necessary to respond to the RFI. However, the following information is provided at this time. Details of all usage requirements will be included in an eventual RFP.

The following is the intermachine trunk traffic for the random time period from April 21,

1997, through April 25, 1997:

	Between	Between	Between
	LA and SAC	SAC and SF	LA and SF
Total Usage -	1,053,853	873,402	220,322
Minutes			
Busy Hour	2:00 PM	2:00 PM	10:00 AM
Average Holding	2.64	2.76	3.09
Time - Minutes			

The overflow traffic handling is as follows:

LA to SAC: WATS 5

SAC to SF: WATS 5 then DOD LA to SF: WATS 5 then DOD SAC to LA: WATS 5 then DOD SF to SAC: WATS 5 then DOD SF to LA: WATS 5 then DOD

51. Is there any plan to include the voice/data/video services to schools and state universities?

- a. voice messaging
- b. Internet access
- c. video
- d. distance learning

RESPONSE:

Yes, Government Code Section 14931 states that: "Any systems established shall be available to all public agencies in the state on such terms as may be agreed upon by the agency and the department".

52. How does CALNET currently update the MSN100 switches and the NMS database for end users, as compared to LSSGR call management standards and CMS for Centrex?

RESPONSE:

CALNET has a proprietary automatic recent change process for service order system activity. As stated in section 3.1.6.2.4 Provisioning, some agencies use ACORDS to make changes to existing service. ACORDS is provided through use of American Telecorp's Cenpac product software release 4.02 version 7.

53. Section 3.1, page 3-2 lists major state agencies that operate their own private telecommunications network(s). Missing from this list are California Department of Forestry and California Conservation Corps among others. Will they be included in this procurement?

RESPONSE:

All departments under the oversight of the administration will be included in the user base of the RFP. The networks identified in Section 3.1 are only some of the networks in the state in which information was available at the time of release of the RFI

54. In section 3.1 the DGS/TD has indicated direct control of expenditures over approximately \$68 million a year. Does this include payphone telephone services? If not, what would this figure be if you included payphone telephone services?

RESPONSE:

The \$68 million a year does not include payphone. In Section 4.3.4.5 we identified that Public Access Telephone Service (Pay Telephone) will be managed through a separately bid contract outside of this process.

55. In section 3.1.1 DGS/TD provides an overview of CALNET Suite of Services. In 3.1.1.11 Payphone Services are described as being part of this RFI, yet in 4.3.4.5, page 4-16 there is a statement that infers public access telephone service will not be part of this RFI/RFP. Is that an accurate assumption? If it will not be part of this RFI/RFP how does DGS/TD intend to handle this service since your current contract expires in August 1997?

RESPONSE:

Section 3.1.1.11 identifies Payphone Services as a part of the current environment. Section 4 describes the proposed environment. As stated in Section 4.3.4.5, pay telephones will be managed through a separately bid contract outside of this RFI/RFP process. The existing contract will be extended pending completion of the RFP process.

56. In section 4.10, page 4-26 DGS/TD expects contractor to bill and collect a contract administrative fee. What will be the fee be based upon? What is the amount of the fee DGS/TD collects today? How is the amount determined?

RESPONSE:

The fee will be based on Division costs to manage the eventual contract as well as perform other mandated functions. Of the \$68.3 million of annual billing for service, the state contracts out \$55.4 million. The difference between the two figures, \$12.9 million a year, represents DGS/TD costs for equipment, personnel, and support..

57. In section 3.1.1.3 Local Consolidated Services, page 3-4, it is noted that DGS/TD receives an administration fee from the service provider to help offset costs for common equipment. What is this fee and how is it determined?

RESPONSE:

The fee was negotiated along with the other terms and conditions of the Centrex and CentraNet agreements. It is our intent that in the eventual RFP the selected company will collect an administrative fee based on direction from the Division. Responses to questions in Section 5.8.6 will help the state determine the scope of the eventual RFP.

58. What member agencies and departments will evaluate the responses to this RFI? Will there be representation from agencies and departments outside of DGS/TD?

RESPONSE:

The exact membership of the RFI evaluation team has not been determined at this time. However, it is anticipated the membership team will be made up of representation from within and outside of DGS/TD.

59. What role will DOIT (Department of Information Technology) perform with respect to this RFI?

RESPONSE:

DOIT has oversight responsibility for the development of the strategic direction for information technology. Their role will be to ensure this project is consistent with their strategic direction.

60. In Section 3.1.4, page 3-36, does the \$18,742,000 Annual billing for InterLATA Long Distance Service also include InterLATA/Interstate? We could not locate any reference to Interstate traffic other than MCI providing services for locations outside of CA, being billed to calling card accounts.

RESPONSE:

The \$18,742,000 annual billing for InterLATA long distance service includes interstate and international calling processed through the CALNET long distance service.

61. International services were not mentioned in the RFI. Will international services be part of the RFI/RFP? What is the estimated value of these services?

RESPONSE:

In Section 4.3.1.1, international services are to be considered a part of the provided long distance service. DGS/TD does not have an accurate value of the international services that may be included in the RFP since some of the costs are billed direct to the using agencies without our involvement or oversight.

62. In assuming the CALNET debts and assets, does that also include all CALDEX servicing equipment and the fiber and copper conduit structure in Sacramento, Los Angeles, San Francisco and San Diego?

RESPONSE:

Yes it does.

63. Does a vendor have to articulate their position in terms of being a prime, or subcontractor in response to the RFI?

RESPONSE:

No. Our main interest is in your response to the questions in Section 5.

64. May vendors propose network designs which provide functionality as outlined in the RFI using alternative physical and geographic topologies, or are vendors required to duplicate the exact hardware and topological layouts of SCIPs, DCS, etc. as outlined in RFI?

RESPONSE:

DGS/TD is seeking a solution or solutions based on the delivery of services meeting the functionality outlined in the RFI. Responses to the RFI may include alternative topologies and equipment as appropriate to meet the functionality of the RFI. The

response is not required to identify the topology or equipment used to deliver the proposed service.

65. For each data network, please provide descriptions of CPE hardware/software (including physical interfaces, data link, network and transport protocols, software revisions, etc.) of devices which terminate private lines in the data networks described in Section 3.1.3.

RESPONSE:

The information requested is not readily available for this RFI. At this time DGS/TD is determining the scope of the eventual RFP based on input from interested parties. If it is determined that data network CPE will be included in the RFP, then detailed information will be provided.

66. In reference to 3.1.1.9 on page 3-7, is CALNET transport referred to in paragraph three included in this bid, or are we required to tie into the existing CALNET infrastructure?

RESPONSE:

The transport facilities referred to in Section 3.1.1.9 are to be included in the response to this RFI. The state is considering modifying the scope of this RFI and eventual RFP to include end to end Frame Relay service. An addendum will be issued if changes are made to the original RFI direction.

67. In reference to 4.3.3.1 on page 4-10, must the proposed Frame Relay solution hub traffic within LATA boundaries even if such hubbing imposes higher costs and/or lower performance?

RESPONSE:

The state is considering modifying the scope of this RFI and eventual RFP to include end to end Frame Relay service. An addendum will be issued if changes are made to the original RFI direction. The present direction is for Frame Relay switching and hubbing to be addressed through a separate Frame Relay RFP. Only the Frame Relay transport was to be included in this RFI at this time.

68. In reference to 4.3.3.2.7 on page 4-14, please clarify "automatic internal bill-back".

RESPONSE:

A survey of the major data users in the state indicated a desire for a billing system that would allow the data users to allocate their charges to sub departments or cost centers using the provided billing system.

69. In reference to 4.4.1 on page 4-17, is an itemized list of equipment available?

RESPONSE:

An itemized list of equipment will be available through the eventual RFP based on the scope of the RFP. Responses to this RFI will help determine the scope of the RFP and the equipment that will be included in the bid.

70. In reference to 4.11.3.2 on page 4-31, please clarify, 'percent availability'' (between what points, over what time period.?).

RESPONSE:

Percent availability is for all private line services provided under the eventual RFP and are calculated over a quarterly period (3 months).

71. Could you elaborate on the "Alternative Procurement Process", beyond what is described in Section 5.1.2. Is there something you have that describes this in more detail so that we have a better understanding of how it works?

RESPONSE:

The Alternative Procurement Process is new within the state. Agencies that believe they have a business problem that can be best met using a procurement process that differs from the traditional method, may request to pilot an alternative acquisition technique. The State Administrative Manual Section 5215 (available at http://www.dgs.ca.gov) describes how agencies may request to use the pilot technique.

The Franchise Tax Board has developed a model for a Performance Based Procurement alternative that DGS/TD will consider for use. A description of this model is available at:

http://www.ftb.ca.gov/other/index.htm

Attachment for question 12

RFI TD-97-01MAILING LIST MARCH 31, 1997

FirstName	LastName	Company	Address1	City	State	PostalCode	WorkPhone
Austin	Okoegwale	A F A Enterprises	P.O. Box 2702	Chino	CA	91708	(909) 590-5831
Alex	Aquino	ABX/CBN Telecom	859 Cowan Road G/F	Burlingame	CA	94010	(415) 697-3700
Bill	Hembree	American Communications Network	21501 Ridgeway Highway	Potter Valley	CA	95469	
Sam	Medina	Ameritel	P.O. Box 6740	Napa	CA	94581-1740	(707) 257-3875
Bill	Coats	AT & T	8950 California Center Drive, Suite 240	Sacramento	CA	95826-3279	(916) 361-5011
Norman J.	Smith	AT & T	795 Folsom Street, Suite 625	San Francisco	CA	94107	(415) 442-2555
Ray	Stokes	Brooks Fiber Communications	400 Capitol Mall, #2580	Sacramento	CA	95814	(916) 431-1824
James A.	Smith, Jr.	Brooks Fiber Communications	400 Capitol Mall, Suite 2580	Sacramento	CA	95814	(916) 658-1820
Jan	Burg	Burg Data Communications	100 West El Camino Rio, Unit 68	Mountain View	CA	94040	(415) 254-0500
State of CA	Representa tive	Capital Telephone Company, Inc.	2700 Fruitridge Road, #A	Sacramento	CA	95820	(916) 393-2700
Chris S.	Killian	Carrier Communications	42326 10th Street West	Lancaster	CA	93534	(805) 945-5448
Ronnie	Christense n	Cisco Systems, Inc.	3100 Zinfandel Drive, Suite 200	Rancho Cordova	CA	95670	(916) 631-1954
Jim	Smith	Comptel	1900 M Street, N.W., Ste. 800	Washington	DC	20036-6650	(202) 296-6650
Bill	Wilde	Creative Interconnect Telecom	P.O. 353	San Carlos	CA	94070	(415) 592-6729

FirstName	LastName	Company	Address1	City	State	PostalCode	WorkPhone
State of	Representa	CTS	1507 21st Street, Suite 202	Sacramento	CA	95814	(916) 444-8022
CA	tive	Telecommunicatio					
		ns					
Bruce Hakimi	Hakimi	Cybernet	2714 Pico Boulevard, Suite 206	Santa Monica	CA	90405	(310) 203-9900
		Communications,					
		Inc.					
Lee	Kercher	Department of	915 Capitol Mall, Suite 312	Sacramento	CA	95814	(916) 657-0318
		Information					
		Technology					
Laura	Beeman	E D S State	1201 K Street, Suite 1020	Sacramento	CA	95814	(916) 264-1804
		Operations					
		Division					
Joni	Logan	Electric	8100 NE Parkway Drive, Suite	Vancouver	WA	98662	(360) 892-1000
		Lightwave Inc.	150				
Michael C.	Morey	Electric	650 J Street	Sacramento	CA	95814	(916) 444-1744
		Lightwave Inc.					
Kerry	Tassopoulo	Excel	8750 N. Central Expressway, Ste.	Dallas	TX	75231	(214) 863-8740
	s, ESQ.	Communications,	2000				
		Inc.					
Larry	Weber	Executone	460 N. Yosemite Avenue, #10	Oakdale	CA	95361	(800) 877-4766
		Information					
		Systems					
Douglas	Denoff	Fiber Net	2701 Ocean Park Boulevard	Santa Monica	CA	90405	(310) 314-4141
		Telemanagement,					
		Inc.					
Patrick	Flaherty	Fluor Daniel Inc.	3333 Michelson Drive 534DL	Irvine	CA	92698	(714) 975-2000
Timothy	Gaines	Fujitsu Business	331 Lakeside Drive	Foster City	CA	94404	(415) 531-5100
		Communications					
Jeffrey	Buckingha	GST Call America	4251 S. Higuera, #800	San Luis Obispo	CA	93401-7700	(805) 545-5100
	m						
Dave	Bickford	GTE of California	630 Bercut Drive	Sacramento	CA	95814	(916) 657-6137

FirstName	LastName	Company	Address1	City	State	PostalCode	WorkPhone
Ken	Simon	GTE of California	630 Bercut Drive	Sacramento	CA	95814	(916) 554-4999
Robert	Freinberg	GTE Telephone Operations	2801 Townsgate Road	Thousand Oaks	CA	91361	(805) 230-3450
Stan	Slaton	HCC Telemanagement	1575 Spinnaker Drive, Suite 204	Ventura	CA	93001	(805) 650-6461
Les S.	Spahnn	Heim, Noack, Kelly & Spahnn	770 L Street, Suite 960	Sacramento	CA	95814	
Andrew O.	Hesse	Hesse-Stobbe & Associates	428 J Street, Suite 340	Sacramento	CA	95814	(916) 446-5624
Bernard	Bowler	IBM	2700 Gateway Oaks Dr., Suite 100	Sacramento	CA	95833	(916) 641-4420
Bruce	Holdridge	ICG Access	180 Grand Avenue, Suite 1000	Oakland	CA	94162	(510) 251-7033
Steve	Yago	ICG Telecom Group	3105 Fite Circle, Suite 106	Sacramento	CA	95827	(916) 366-1234 ext. 22
Bryan	Renner	ICG Telecom Group, Inc.	5 Park Plaza, Suite 1150	Irvine	CA	92614	(714) 474-4424
Steve	Wood	IEC Communications	One Bush Street, Suite 1500	San Francisco	CA	94549	(415) 576-3444
Lorenzo	Snowden	InfoNet Group	4401 Spring Meadow Road	Cameron Park	CA	95682-9629	(916) 677-3922
Michael J.	Cox	Information, Integration, Innovation and Assoc.	305 Meadowfield Road	Yorktown	VA	23692	(804) 898-1863
Richard W.	Chapple	Integrated Telemanagement Services, Inc.	1919 Williams Street, Suite 350	Simi Valley	CA	93065	(805) 520-7020
Vinnie	O'Reilly	International Network Services	3500 American River Dr., Suite 400	Sacramento	CA	95864	(916) 486-8700
Skip	Henry	International Network Services	3500 American River Drive, Suite 400	Sacramento	CA	95864	(916) 486-8700
John R.	Lloyd III	International Network Services	111 Deerwood Road, Suite 200	San Ramon	CA	94583	(510) 831-4743

FirstName	LastName	Company	Address1	City	State	PostalCode	WorkPhone
Jesse	Moers	ITEK Communications	3166 E. Palmdale Blvd., Suite 203	Palmdale	CA	93550	
David	Wiegand	IXC Carrier, Inc.	5000 Plaza on the Lake #100	Austin	TX	78746	(512) 328-1112
Jerry	Wilson	J & R Technologies	P.O. Box 6200	Arnold	CA	95223	(209) 795-7514
Edward H.	Petsuch, MBA	LCI International	1350 Treat Boulevard, Suite 200	Walnut Creek	CA	94596	
Bob	Wayman	Lockheed IMS	1200 K Street NW	Washington	DC	20005	(202) 414-3000
Jeffrey	Ganek	Lockheed IMX	1200 K Street NW	Washington	DC	20005	(202) 414-3623
Joe	Bromley	MCI	5 Hutton Center Drive, Suite 400	Santa Ana	CA	92707	(714) 755-2514
Patrick	Quarry	MCI Telecommunicatio ns	2485 Natomas Park Drive, Suite 450	Sacramento	CA	95833	(916) 649-6047
James W.	Leonard	MCI Western Region	6 Hutton Centre Drive, Suite 970	Santa Ana	CA	92707	(714) 755-2626
Mark	Levy	MFS Telecom	800 W. 6th Street, Suite 1150	Los Angeles	CA	90017	
Curtis	Taylor	MFS Worldcom	4280 Latham Street, Suite 4	Riverside	CA	92501	
Rick	Whisman	MTC Telemanagement Corp.	1304 Southpoint Boulevard	Petaluma	CA	94954	(707) 762-9600
Dale	Deforge, ESQ.	National Telephone & Communications	2801 N. Main Street	Irvine	CA	92714	(714) 224-7750
Tom	Applebau m	Nortel Communications Systems Inc.	2305 Camino Ramon	San Ramon	CA	94583	(400) 779-2957
Dennis	Stalter	Nortel Communications Systems Inc.	2305 Camino Ramon	San Ramon	CA	94583	(510) 867-2309
Michael A.	Snipes	Nortel Communications	2800 Gateway Oaks Drive	Sacramento	CA	95833	(916) 565-3736

FirstName	LastName	Company	Address1	City	State	PostalCode	WorkPhone
		Systems, Inc.					
James	Horalek	Nortel	2305 Camino Ramon	San Ramon	CA	94583	(510) 867-2648
		Communications					
		Systems, Inc.					
State of	Representa	North American	12000 Crowpoint Dr., Sutie 175	San Antonio	TX	78233	(800) 766-6624
CA	tive	Intelecom Inc.					
State of	Representa	Objective Systems	100 Blue Ravine Road	Folsom	CA	95630	
CA	tive	Integrators					
Blair	Brown	Octel	455 Market Street, Suite 1050	San Francisco	CA	94105	(415) 882-6028
		Communications					
		Corp.					
Jennifer	Imrie	Octel	777 Campus Commons Rd., Suite	Sacramento	CA	95825	(916) 568-3870
		Communications	200				
		Corp.					
George M.	Will	Octel	19900 MacArthur Blvd., Suite	Irvine	CA	92612	(714) 253-2621
		Communications	1000				
		Corp.					
William	Habermehl	Orange County	P.O. Box 9050	Costa Mesa	CA	92628-9050	(714) 966-4311
		Department of					
		Education					
Kas	Ameri	Pacific Auditing	10724 Wilshire Boulevard	Los Angeles	CA	90024	(800) 566-7858
		and Consulting					
Joseph F.	Foster	Pacific Bell	610 Sequoia Pacific Boulevard	Sacramento	CA	95814	(916) 557-4477
Ed	Mosbaugh	Pacific Bell -	2700 Watt Avenue, Room 3473	Sacramento	CA	95821	(916) 972-5330
		Govt. Services					
Gary	Rath	Pacific Bell,	2600 Camino Ramon, Rm. 3S551	San Ramon	CA	94583	(510) 823-5111
		Public Sector					
Houston L.	Williams	Pacific Network	P.O. Box 611207	San Jose	CA	95161	(800) 537-4767
		Supply Inc.					
John	LaRue	PacWest Telecom,	4210 Coronado Avenue	Stockton	CA	95204	(209) 948-2127

FirstName	LastName	Company	Address1	City	State	PostalCode	WorkPhone
		Inc. dba Americall		•			
Milton	Morris	PFI Phoenix	160 Blue Ravine, Suite A	Folsom	CA	95630	(916) 353-5151
		Fiberlink, Inc.					
State of	Representa	Phoenix Fiberlink,	160 Blue Ravine Road, Suite A	Folsom	CA	95630	(916) 353-5151
CA	tive	Inc.					
Denise	Newman	Phoenix Network,	1687 Cole Boulevard	Golden	CO	80401	(303) 232-4333
		Inc.					
John	Ferdowsi	Phone Masters	1022 S. La Cienega Boulevard	Los Angeles	CA	90035	(310) 289-0222
Michael	Parker	Priority 1+ Long	8520 Archibald Avenue, Bldg. 20	Rancho	CA	91730	(909) 483-1240
		Distance		Cucamonga			
Patricia	Cecchi	Prospect	173 Center Street	Auburn	CA	95603	(800) 564-7287
		Advanced					
		Telephone					
Harvey R.	Watling	RCC Consultants,	74 New Montgomery Street, Suite	San Francisco	CA	94105-3419	(415) 357-3612
		Inc.	200				(24.5) 442.222.5
Lee	Rees	Rees and Assoc.,	1121 L Street, Suite 808	Sacramento	CA	95814	(916) 448-9006
D1 '1		Inc.	D.O. D. 060	D '11		0.5.6.61	(016) 060 0700
Phil	Germond	Roseville	P.O. Box 969	Roseville	CA	95661	(916) 969-8700
		Telephone					
William J.	Proffer	Company SAIC	10260 Communa Daint Duissa MC	Can Diago	CA	92121-1578	(610) 522 2466
william J.	Proffer	SAIC	10260 Campus Point Drive, MS C-6	San Diego	CA	92121-1578	(619) 522-2466
John	Barmettler	SAIC	2880 Shadlands, Suite 101	Walnut Creek	CA	94598	(510) 926-7363
John M.	Eger	San Diego State	5500 Campanile Drive, MC 4522	San Diego	CA	92182	(619) 594-6910
JOHN WI.	Egci	University	3300 Campanne Drive, We 4322	San Diego	CA	92102	(019) 394-0910
Michael A.	Brown	San Diego	4420 Hotel Circle Ct., Suite 150	San Diego	CA	92108	(619) 296-2400
iviiciiaci 71.	Diowii	Telephone, Inc.	7720 Hotel Chele Ct., Builte 130	Sun Diego)2100	(01)) 2)0 2400
Tim	Voors	Service Disabled	103 Providence Mine Road #101	Nevada City	CA	95959	(916) 265-3632
	7 0015	Veteran	Too Trovidence will read with	1 to vada City			(310) 200 3032
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FirstName	LastName	Company	Address1	City	State	PostalCode	WorkPhone
Christina	Polley	Siemans Rolm Communications Inc.	10860 Gold Center Dr., Suite 110	Rancho Cordova	CA	95670	
Bharat	Dave	Siemens Business Comm. Systems, Inc.	400 Executive Parkway	San Ramon	CA	94583	(510) 277-5503
Benjamin R.	Stockton	Spectrum Telecom Systems	2151 Salvio Street, Suite R	Concord	CA	94520	(510) 798-1240
Charlie	Crothers	Spectrum Telecom Systems International, Inc.	321 Hartz Avenue, Suite 200	Danville	CA	94526	(510) 743-2800
Joe	Gough	Sprint Corp.	1545 River Park Drive, #300	Sacramento	CA	95815	(916) 922-5277
Tom	Elliott	Storage Tek	9429 S.E. 29	Midwest City	OK	73130	
State of CA	Representa tive	Strata Group	3301 Rider Trail So., Suite 170	St. Louis	МО	63045	
Michaele	Rittenberg	Sun Microsystems	2550 Garcia Avenue MS PAL 01- 222	Mountain View	CA	94043-1100	(415) 336-0234
Steven G.	Fasching	SuperTel Communications, Inc.	12526 High Bluff Drive, Suite 210	San Diego	CA	92130-2064	(619) 481-0180
Barbara	Egan	TCG	1 Bush Street, Suite 510	San Francisco	CA	94104	(415) 276-0039
Carlos	Ripani	Tel Set Communications	10980 Arrow Route, Suite 103	Rancho Cucamonga	CA	91730	(909) 980-5621
Benita	Anderson	TelCo Communications Group	4215 LaFayette Center Drive	Chantilly	VA	20151	(703) 227-7914
Fred	Dillet	Telcom	P.O. Box 801	Diablo	CA	94528	(510) 946-0144
John K.	Rak	Telcom Data	P.O. Box 4036	La Mesa	CA	91944	(800) 984-3649
Amrik	Poonian	Telecom Solutions Inc.	19401 S. Vermont Avenue, #F104	Torrance	CA	90502	(310) 323-9344
Paul	Lee	Teleconcepts	11700 Sterling Avenue	Riverside	CA	92503	(800) 677-6709

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State of CA	Representa tive	Telelink Communications	7111 Governors Circle	Sacramento	CA	95823	(916) 424-5454
Greg	Howard	Teleport Communications Group	625 Ellis Stret, Suite 205	Mountain View	CA	94043	(415) 276-0564
Tom	Champ	Teleport Communications Group	5355 Mira Sorrento Place, Suite 700	San Diego	CA	92121	(619) 812-0114
Steven	Swenson	TelTrust Communications Services	221 North Charles Lindbergh Drive	Salt Lake City	UT	84060	(801) 535-2000
Mark	O'Krent	The Telephone Connection of Los Angeles	9911 W. Pico Boulevard, Suite 680	Los Angeles	CA	90035	(310) 789-7900
State of CA	Representa tive	TIE Communications Inc.	3841 N Freeway Boulevard, #175	Sacramento	CA	95834	(916) 568-2889
Rich	Dunn	Transtel Communications	324 South State Street #300	Salt Lake City	UT	84111	(801) 521-0200
W. Audie	Long	U. S. Long Distance	9311 San Pedro, Suite 300	San Antonio	TX	78216	(210) 525-6211
Susan	McCabe	Universal Pacific	333 South Grand, Suite 2850	Los Angeles	CA	90071	(213) 613-9000
Kirk	Bennett	US One Communications Corp.	500 Ygnacia Valley Rd., Ste. 250	Walnut Creek	CA	94596	(510) 926-6423
State of CA	Representa tive	Vertex Telecommunicatio ns Inc.	11195 Central Avenue, #4	Ontario	CA	91762	(909) 627-1945
William A.	Morgan	W & J Partnership	3450 Bluegrass Court	Morgan Hill	CA	95037-6417	(408) 779-1714
Rick	Houghton	Westel Communications	7752 North Avenue #205	Lemon Grove	CA	91945	(619) 463-8138

FirstName	LastName	Company	Address1	City	State	PostalCode	WorkPhone
Jim	Britt	Williams	353 A Vintage Park Drive	Foster City	CA	94404	(415) 577-2442
		Telecommunications Sytems Inc.					
Brent	Lacho	WorldCom	2829 Towngate Road, Suite 200	Westlake Village	CA	91361	(805) 371-3500
Ed	Morehouse	WorldCom	450 Mission Street, Third Floor	San Francisco	CA	94105	(415) 281-7518

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